

TITLE

METHOD OF DECREASING LIQUIRITIGENIN-DERIVED ISOFLAVONES  
RELATIVE TO TOTAL ISOFLAVONES IN PLANTS AND  
PLANTS PRODUCING REDUCED RATIO OF LIQUIRITIGENIN-DERIVED  
ISOFLAVONES RELATIVE TO TOTAL ISOFLAVONES

ABSTRACT

This invention pertains to methods for decreasing the ratio of  
liquiritigenin-derived isoflavones relative to total isoflavone levels in  
isoflavonoid-producing plants and plant parts by transforming plants with a  
recombinant DNA construct comprising a nucleic acid sequence of at least  
200 nucleotides and having at least 75% sequence identity to a polynucleotide  
encoding a chalcone reductase. More preferably, this invention pertains to methods  
for decreasing the ratios of daidzein and glycitein and their conjugates relative to  
total isoflavone levels in soybean plants and soybean plant parts by transforming  
plants with a recombinant DNA construct comprising a nucleic acid sequence of at  
least 200 nucleotides and having at least 75% sequence identity to a polynucleotide  
encoding a chalcone reductase.

LMC/dmm